

ficacy data was obtained from two randomised clinical trials comparing Pip-Taz (4g/0.5g t.i.d.) with Imi-Cil (high level dose, 1g/1g t.i.d.; low level dose, 0.5g/0.5g t.i.d., respectively). Information on treatment patterns and resources used was obtained from five physicians in Spain with experience in treating this condition. Prices or unit costs were obtained from a wide range of sources including published articles and government publications. All prices are presented in 1995 local currency (Pts). The robustness of the results was tested using a sensitivity analysis.

RESULTS: The efficacy rate (obtained from the analysis of intention-to-treat patients with clinical success) of Pip-Taz was higher (+12.5%) than low-level doses and equal (+4.0%) to high-level doses of Imi-Cil. The incremental costs in the Pip-Taz group were -81,651 Pts (average cost: 543,12 Pts vs. 624,773 Pts) and -33,217 Pts (487,698 Pts vs. 520,915 Pts) in comparison with high- and low-level doses of Imi-Cil, respectively. According to the incremental cost-effectiveness analysis, the Pip-Tazo treatment would result in a saving per every additional patient with clinical success of 2,041,275 Pts and 265,736 Pts versus high and low doses of Imi-Cil, respectively. However, in the hypothetical case that the Imi-Cil's clinical efficacy was higher than the Pip-Taz efficacy, the former treatment would provide savings.

CONCLUSIONS: This model shows that Pip-Taz clinical efficacy is higher or equal to Imi-Cil, and in that case, Pip-Tazo would prove to be more cost-effective than Imi-Cil in the treatment of intra-abdominal infections.

PIC6

USING A PNEUMONIA-SPECIFIC SEVERITY OF ILLNESS MODEL IN ASSESSING VARIATION IN HOSPITAL LENGTH OF STAY FOR COMMUNITY-ACQUIRED PNEUMONIA PATIENTS

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OBJECTIVE: To assess variations in hospital length of stay for community-acquired pneumonia patients, adjusted for severity of illness using a pneumonia-specific model as described by Fine et al. in the *N Engl J Med* 1997;336:243-50.

METHODS: All patients admitted to University Hospital, San Antonio, during January-December 1996 with a primary ICD-9CM diagnosis of 486 (pneumonia with no organism specified) were evaluated retrospectively via chart review. Patient demographics data, clinical findings, hospital resource utilization such as length of stay, length of antibiotic therapy, and hospital mortality were collected. Patients were stratified into five risk classes.

RESULTS: A total of 187 patients was evaluated. There were (36, 60, 42, 40, 9) patients in risk classes (I, II, III, IV, V). Hospital length of stay for patients in classes (I, II, III, IV, V) were in order LOS \leq 3 days (5, 13, 12, 3, 2), LOS 4-7 days (24, 39, 20, 18, 1), and LOS > 7 days (7, 8, 10, 19, 6), respectively. Average length of hospital stay

was (6.6, 5.1, 6.2, 8.1, 9.6) days in classes I-V, respectively, Anova $P < 0.0026$.

CONCLUSION: Variations exist in hospital LOS among the five groups. 81% (78 patients in I and II combined) were treated > 3 days, and 71% (30 patients in class III) were treated > 3 days. These low to moderate risk classes (I, II, III) could be a target for reduced LOS, quality assurance, and cost-effectiveness program. These differences in LOS could be attributed to other unmeasured patient, physician, or hospital related factor and its process of care.

PIC7

EPOETIN ALFA ADMINISTERED TO ACADEMIC HEALTH CENTER DIALYSIS PATIENTS: COMPARISON TO HCFA BILLING RECORDS

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Epoetin alpha (Epo) for use in dialysis patients represents a substantial expenditure for academic medical centers.

OBJECTIVE: The purpose of this study was to evaluate the efficiency and accuracy of Epo billing and reimbursement systems administered and dispensed in 8 geographically distributed academic health centers.

METHODS: A retrospective chart review was performed for 604 patients across the 8 centers, during the third or fourth quarter of 1989 or the third quarter of years 1990 through 1993. Data collected included HCFA provider number, Medicare number, quantity of Epo prescribed, quantity of Epo recorded as administered for home dialysis, number of doses of Epo not administered as prescribed, reason for missing dose, available hemoglobin and hematocrit values, and relevant information to explain skipped dialysis treatments. The number of units administered or dispensed for home use was matched to an abstract of the HCFA reimbursement files for comparison.

RESULTS: Approximately 18% of the total Epo actually administered and/or dispensed during the course of the study was not represented in the HCFA reimbursement data. This ranged from 2% to 45% in the different centers. The total volume of Epo administered or dispensed per center was not related to the percentage of underrepresentation in the HCFA reimbursement files.

CONCLUSION: Epo administered and/or dispensed to Medicare primary dialysis outpatients was under-represented in HCFA reimbursement data. As a result, institutions may be experiencing a significant loss of reimbursement. The exact reasons for this discrepancy are unclear. Institutions should evaluate their Epo reporting/billing policies and procedures to potentially increase revenue recovery they are due.